DOCUMENT RESUME

ED 202 088 EA 013 525

AUTHOR Coombs, Fred S.
TITLE Opportunities in the Comparison of State Education Policy Systems.
INSTITUTION Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO IFG-PR-80-A16
PUB DATE Oct 80
GRANT OB-NIE-G-80-0111
NOTE 30p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 7-11, 1980).
AVAILABLE FROM Institute for Research on Educational Finance and Governance, CERAS Bldg., Stanford University, Stanford, CA 94305 ($1.00).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Case Studies; *Comparative Analysis; *Educational Policy; *Educational Research; Policy Formation; Predictor Variables; Research Design; *Research Methodology; Research Needs; Research Opportunities; Research Problems; *State Government

ABSTRACT

Because of states' growing roles in education, the study of variation in state educational policies contributes to a better understanding of policy processes and to the prediction of possible policy outcomes. Comparing state educational policies involves choosing variables and analytical designs and defining cases, concepts, and measurement. Variables to study include background and outcome variables, which are already well formulated, and policy variables, which are not. Suggested here as policy variables are policy specificity (how specific a policy's prescriptions are), policy legitimacy (among its constituents), policy effectiveness, policy efficiency (in relation to cost), and policy evaluation (by interested groups). Researchers analyzing educational policies can choose either a "basic" or a "nested" analytical design. The former establishes relationships among variables by measuring the association of variables among the states. The latter first finds relationships among variables within states before analyzing the variation in these relationships from state to state. Interstate educational policy analysis must include definition of cases and ensure the equivalence of cases, concepts, and measures. Single-state case studies, because of their specificity, usually do not generate testable hypotheses for comparing educational policies. (RW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED202088

IFG

Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

EA 013 525

Project Report No. 80-A16

OPPORTUNITIES IN THE COMPARISON OF STATE EDUCATION POLICY SYSTEMS

Fred S. Coombs*

October 1980

*The author is Associate Professor, Department of Educational Policy Studies, and Director of the Office for the Analysis of State Educational Systems at the University of Illinois at Urbana-Champaign.

The research for this report was supported by funds from the National Institute of Education (Grant No. OB-NIE-G-80-0111). The analyses and conclusions do not necessarily reflect the views or policies of this organization.

This paper was presented at the Annual Meetings of the American Educational Research Association, Boston, Massachusetts, April 7-11, 1980.

INSTITUTE FOR RESEARCH ON EDUCATIONAL FINANCE AND GOVERNANCE

The Institute for Research on Educational Finance and Governance is a Research and Development Center of the National Institute of Education (NIE) and is authorized and funded under authority of Section 405 of the General Education Provisions Act as amended by Section 403 of the Education Amendments of 1976 (P.L. 94-482). The Institute is administered through the School of Education at Stanford University and is located in the Center for Educational Research at Stanford (CERAS).

The research activity of the Institute is divided into the following program areas: Finance and Economics; Politics; Law; Organizations; and History. In addition, there are a number of other projects and programs in the finance and governance area that are sponsored by private foundations and government agencies which are outside of the special R&D Center relationship with NIE.

Abstract

Interstate variation in state education policies, in the conditions under which those policies take shape, and in educational outcomes, provides an attractive opportunity to understand better the attributes and dynamics of our 50-state policy systems. If our goal is a theory of policy, it will be necessary to develop "policy variables" such as "policy specificity," "policy legitimacy," or "policy efficiency" by which we can describe any given policy and compare policies across states.

The logic of basic comparative state analysis requires that such variables refer to the state level. Possible relationships between state-level background variables, policy variables, and educational outcomes can be explored and tested only by cross-state studies. Nested comparative studies may analyze lower-level variables on a state-by-state basis to determine whether observed lower-level relationships are invariant across states.

Two distinct problems of equivalence exist in comparative studies: equivalence of cases, which is a question of function, and equivalence of attributes (and their measurement) which is often a question of meaning. Despite these difficulties, there is no apparent alternative to comparative studies for the development of general knowledge about state-level policy, the ways in which it is formulated, and its effects upon the education of our children.

Those who teach in the field of state government and politics have, I am told, a trade secret that few of us enjoy. Whenever confronted with a difficult question from a student--the kind of impertinence for which no ready answer comes to mind--the instructor can almost always take refuge in a stock response: "It varies from state to state." At that point, I understand, the matter usually rests, by tacit agreement of student and professor. Seldom is the question of why it varies from state to state pursued. The most persistent theme of this paper is that interstate variation in the field of educational policy provides an opportunity to better understand the dynamics of the policy process and the consequences of various policies--an opportunity that has not been very systematically exploited to date.

Of course education policies, as well as the conditions that bring them about and the consequences that flow from them, also vary from country to country, from local district to local district, and even from classroom to classroom. Comparative policy studies are not, and should not be, limited to the state level. Yet, there are especially compelling reasons for focusing on the state when exploring modern U.S. education policy. By virtually any measure, states in the U.S. are emerging as a prime arena of decision for a wide range of policy questions in education. From allocative policy which redistributes tax monies to an increasing panoply of regulatory policies, states shape the nature of schooling. The financial resources available for our children's education, the kind of teacher who will teach them, the subjects taught, the size and organization of the class, the kind

of discipline allowed, the construction of the school building, and the qualifications of school administrators are just a few of the areas in which state education policy affects a child's education.

It was not always so. Before World War II, and even for some years after, the reputation of education as predominantly a local policy concern was intact. Local school boards and the superintendents they hired enjoyed broad latitude in charting the course their schools would follow. Constraints were more likely to be imposed by the local citizenry than by the state education agency (SEA). Federal government intervened in significant ways in the 1960s and the federal role continues at much the same level into the 1980s. While the controversy raged over federal incursions into areas such as school desegregation, compensatory aid to the economically disadvantaged, Head Start, school lunch programs, sex equity, and education of handicapped children, to name just a few, a quieter revolution was taking place on another front. Despite the rapidly growing cost of education (or perhaps because of it), states shouldered a larger proportion of public elementary and secondary school expenditures and local education authorities (LEAs) found themselves paying for substantially less than half of the total cost for the first time in history. That change, abetted by the federal government's practice of relying on SEAs to administer several federal education programs, has thrust the states into a position of prominence in educational matters and left proportionally less discretion to LEAs. State mandates in such varied areas as special education, health and sex education, school transportation, and minimal competency testing are only the more recent requirements imposed upon local school leaders who once decided such things for themselves.

The emergence of state government in education policy matters is

something of a boon for those interested in understanding better the policy process, for each state constitutes, in many respects, a separate policy system. Because policy on most controversial issues "varies from state to state" across these fifty systems, we have an opportunity for policy research that would not exist should the same policy apply everywhere in the nation. An adequate, manageable number of policy systems with natural variation between them on countless policy variables invites the researcher to address the nagging question, "why."

Percentage of Revenue Receipts of Public Elementary and Secondary Schools from Federal, State, and Local Sources

School year	Federal	State	Local
1942	1.4%	31.5%	67.1%
1962	4.3	38.7	56.9
1978	8.1	44.1	47.8

Source: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Digest of Education Statistics 1977-78, p. 67.

Yet, twenty years of research attention to state education policy has yielded scant return in terms of theory development or general knowledge. In the words of David Wiles (1979):

> . . . the more we look at state-level educational politics the more uncomfortable we feel about our accumulated knowledge base and our methods for study. We recognize . . . that our existing methodology is a hodgepodge of conflicting assumptions about collection, analysis and interpretation. We teeter on the brink of conceptual and methodological problems which "consumed" the study of "community power structure." We recognize the potential of fundamental changes in the 1980s and wonder about the adaptive capacity of our present "tools" of policy research.

What can explicitly comparative state studies contribute? They will provide no "quick fix" for methodological difficulties; in fact, they introduce several methodological problems of their own. Furthermore, they are not an end in themselves. We have no inherent interest in how states compare on the various topics we pursue. But we should keep in mind that no explanation of observed variation across states can take place until that variation is documented. More importantly, the process of comparing states often provides clues about the nature of additional variables that may be brought into the analysis to help account for the observed cross-state variation. As Przeworski and Teune (1970:8) indicate, "The goal of comparative research is to substitute names of variables for the names of social systems . . . ." By designing comparative state studies with this purpose in mind, we may turn our attention, once again, toward a theory of policy in an area which, up to the present, has proved theoretically intractable.

Toward Policy Theory

The first, and most difficult, problem in moving toward a theory of policy is in fashioning a variables out of policies. Historically, social scientists have shied away from the attempt to classify policies or array them along certain dimensions in a manner that would allow aggregation. There is something about a policy that activates our descriptive instincts and paralyzes our usual reflex for systematic comparison and measurement. They are complex, multi-faceted, often ambiguous, and may mean different things to different people. We can, and do, describe policies in great detail, but we resist, with rare exceptions, classifying them or measuring any of their many properties. Yet, until we are able

to classify policies on certain bases or measure them along certain dimensions, we will not have taken the first step toward developing a theory of policy.

At the most obvious level, one can simply observe the presence or absence of a certain kind of policy in a state. As of 1978, the Education Commission of the States (1979) reported that 17 states had policies which anticipated the use of minimum competency testing as an element in determining eligibility for high school graduation, while 33 states had no policy which involved testing minimum competencies for that purpose. That constitutes a crude (two-category) variable, but it is enough to send one looking for the factor or factors that disposed those 17 states toward a policy that others have either not considered or disavowed. In the next section of this paper we will suggest a number of other promising possibilities for creating variables out of information about policies.

The theory we seek might be called "loose" theory. We are not starting with highly formal models and proceeding deductively to develop and test hypotheses. Rather, the emphasis is upon suggesting and testing plausible hypotheses about relationships between variables of interest. As in most social science theory, discovered relationships will be probabilistic. It is, nevertheless, that network of relationships that constitutes the theory. As the network grows, more and more new relationships will be suggested. There is, I would hasten to add, nothing new about this procedure. It is well within the mainstream of social science inquiry. The only departure comes with the introduction of <u>policy</u> variables into the mix, in a search for propositions that relate variation in policy to the conditions that spawn it, on the one hand, and the consequences that

flow from it, on the other.

The heart of policy research, whether in state comparative studies or elsewhere, should be the search for relationships between policy variables and selected background variables on the independent side and outcome variables on the dependent side. For example, one might be interested in the effects of various kinds of state school aid formulas on within-state disparities in per-pupil expenditures. Let us suppose, for purposes of illustration, that two or three basic types of school aid equalization formulas can be identified (Pierce, Garms, Guthrie, and Kirst, 1975). The type of formula states employ can then be related to within-state disparities, measured by taking a ratio of the per-pupil expenditures at the 95th and 5th percentiles of students (Dearman and Plisko, 1979: 166).

Types of Variables Used
in Educational Policy Research

Variable name	Background variables	Policy variables	Outcome variables
Function	Independent	Mediating	Dependent
Nature	Demographic, cultural, social, political, economic	Attributes of Policies	Education or other outcomes; output
Examples	Per-capita income	Minimum competency testing	Academic achievement
	Centralization	Types of state aid formulas	Costs of public education
	Party competition	Legitimacy of deseg. guidelines	Public confidence in schools
	Party in control of legislature	Presence of collective bargaining law	Passage of tax increase elections
	Birth rate		Truancy rates

Someone else, however, might be more interested in the factors that lead some states to adopt one kind of equalization formula as opposed to another. Guesses as to the relevant independent variables might include a measure of disparities in personal income, a measure of strength of minority representation in the state legislature, or a cultural value, such as commitment to equity, which might be derived from samples of public opinion in the state.

In the past, much "policy" research has attempted to relate the kinds of variables we have described as independent with measures of output or outcomes, ignoring the mediating role of policy. As previously suggested, this has been due, in large part, to the inherent difficulty in measuring policies. There are, however, a number of properties of any policy that can be estimated with enough precision to serve as a useful variable. By sharpening our conceptual understanding of policies, we can begin to get the "policy" back into policy research.

The Anatomy of a Policy

Let us define a policy as an authoritative communication of prescribed (or proscribed) behavior for certain target people in certain anticipated situations (Coombs, 1980). Other definitions of policy stress the goals sought, rather than the prescribed behavior. Still others put the emphasis on the actual behavior of the target individuals rather than the prescription. The virtue of defining policy as a communication about expected behavior is that we preserve the ability to compare the prescription with actual behavior in studies of implementation. Similarly, the relationship between stated goals, the behavioral prescription, the actual behavior, and various outcomes can all be empirically examined in the same policymaking episode. It should be noted, however, that while

many statements of policy (e.g., laws, directives, regulations, verbal announcements, etc.) contain either explicit or implicit prescriptions for behavior of certain individuals, many will also contain some justification in terms of goals. Occasionally we will find a policy stated only in terms of the goal and the prescribed behavior must then be inferred (Merritt and Coombs, 1978).

The elements of our definition immediately suggest certain properties of policies that bear systematic attention. The number of people embraced within the target population of a policy may, after Dahl's (1960) formulation of the concept of power, be termed the "scope" of a policy. There is the notion that the scope of compulsory education laws is greater than the scope of laws governing gifted programs, simply because more individuals are affected. While the notion of scope may be useful for comparing policies in different policy areas, it would seem to have limited utility as a policy variable looking across states in the same policy area. We would look, rather, to the following kinds of concepts in our attempt to fashion policy variables.

Policy specificity. By defining policies as essentially prescriptions, we raise a question as to how specific the prescription is. Were we to look carefully at laws and regulations governing student discipline in the various states, we would find substantial variation on the specificity of the prescription. The importance of this variable is that specific prescriptions at one level of government remove discretion at other levels. A state that is quite precise in prescribing the way discipline would be carried out, leaves little latitude to the local district to shape its own discipline policy. It is, in fact, but a short step from this notion of specificity to an index of centralization, with greater specification at the

federal and state levels implying a more centralized system on the assumption that LEAs are left with less discretion as a result. The work of Wirt in this area arrives at a tentative ordering of states on his State Centralism Index and then moves to the level of regional and historical influences (background variables) to explain this variation (Wirt, 1978). The measurement of specificity is neither easy nor impossible. Wirt has shown that it can lead to valuable comparisons of states along a theoretically important dimension.

Policy Legitimacy. By definition, policies are also authoritative. That means that the individuals or institutions that enact and implement them are granted the right to make such demands. In practice, that is always a matter of degree. Were one to examine various state court decisions on school busing which have the force of policy, we might find that the decisions are viewed as more authoritative or legitimate in some states than in others. To determine the legitimacy of a policy, we need to focus not upon the policymakers, but their constituencies--especially target individuals for the policy in question.

Note that target populations do not have to agree with the substance of a policy to judge it legitimate. It is entirely possible to decide that a policy that requires some change in your actions in certain situations is wrong or unwise, yet grant its legitimacy because it was enacted by a person or institution you are willing to grant the right to make those kinds of decisions. The procedure by which the policy was developed will also enter into individuals' assessments of its legitimacy. If traditional, valued procedures have been abrogated or violated, the resulting policy will almost certainly be judged less legitimate.

When policy legitimacy is high, the likelihood of compliance is enhanced (Coombs, 1980). To the extent that a policy is viewed as illegitimate by significant numbers of people, authority must by replaced by power to ensure compliance. That involves stipulating the rewards for compliance or the costs of non-compliance. The perceived differential between these two is the motivation to comply. We might expropriate the terminology of interpersonal power for this concept and refer to the power of the policy. All states have building codes for school construction, but there are major variations in sanctions and enforcement procedures, with stringent penalties for noncompliance in some states and little recourse in others. It seems reasonable for certain types of policy questions to examine variation in legitimacy and/or enforcement power from one state to the next. A better understanding of the relationship between legitimacy and power, or between either of these and policy effectiveness (to be discussed next), will contribute importantly to the development of policy theory.

Policy Effectiveness. The effectiveness of different policies in reaching the same goal may be gauged and compared across states. By effectiveness I mean simply the extent to which a policy has contributed to goal attainment; a variable which could range from "completely" to "not at all." One of the goals of many state education systems is to produce students who are knowledgeable about their civic responsibilities and allegiant to state and nation. Toward this end, some states require courses in American history, American government, state government, or passage of an examination over the U.S. Constitution before graduating from high school. There is, to my knowledge, little research on the effectiveness of these state curriculum policies in achieving their stated goals (Hess and Torney, 1968). Cross-state research would provide needed insight into

the extent to which such curricular requirements are effective in attaining a clearly-stated goal.

Or take the example of special education policy, where the goal since P.L. 94-142 is presumably universal--to provide all handicapped children the opportunity to develop their potential in the least restrictive educational environment. Sufficient discretion is left to the states in the matter of how to bring this about to create significant variation in approaches. A natural experiment may well be brewing in which the effectiveness of different kinds of state policy can be compared by looking comparatively at all 50 state systems.

Policy Efficiency. A special education program in one state may be judged more effective than that of the neighboring state simply because more resources are expended in the first. The concept of policy efficiency is a ratio of the measured effectiveness of a policy divided by its cost. Adopting the parlance of the economist, policy analysts refer to an efficient policy as "cost-effective."

Costs are usually converted to dollar amounts, for the sake of convenience and comparability across policies. To pursue our example in special education policy, one could calculate the cost of providing the prescribed learning environments through purchased care agreements and compare that with the estimated costs of providing the same kind of environments within local districts or consortia of districts.

There is, among educational researchers in general and even among policy researchers, a neglect of the cost side of proposed programs and policies that dismays practicing policymakers. Seldom, indeed, can real decisions about alternative policy proposals be made without earnest consideration of the relative costs. State education budgets are, for most

practical purposes, zero-sum games in which education programs, most of them worthwhile in objective, compete with each other for a share of the same pie. The professional educator's plea that we "must provide the best education possible, no matter how high the cost" has never been notably persuasive with legislators, governors, or state budget directors who are forced to deal, year after year, with competing demands from various policy sectors on always limited resources.

Policy Evaluation. This is the most ambitious and, I believe, the most promising direction in which we can move in creating policy variables. The essence of politics is, in David Easton's now-classic definition, "the authoritative allocation of value" (Easton, 1953). Inescapably, policy systems, including state education systems, provide valued services and commodities to some groups and individuals even while they are demanding things of value (e.g., taxes) from others. In this process of redistribution, some gain and some lose. One very important aspect of policy study is still, in Harold Lasswell's phrase, "Who gets what, when, how?" (Lasswell. 1936). Countless case studies have attempted to describe the allocative process and outcomes. Few prototypes exist to guide us in making comparisons of the redistributive effect of open versus selective state university admission plans, for example.

How might such an analysis proceed? Basically, we would want to know how positively or negatively various interests evaluate a policy and why. If state tenure and teacher dismissal laws are evaluated quite favorably by teachers' organizations in one state, but another state's laws in the same area are evaluated negatively by teacher leaders, that would constitute evidence that policies in the two states have markedly different distributive effects. Similarly, support for the state school aid formula

from minority interests in certain states invites comparisons with those states where minorities line up in opposition to their state's formula

We are, in proposing this kind of analysis, taking the evaluation of a policy by an individual or group as an indication of whether or not their interest would be served by that policy. This runs counter to the quest for a concept of "objective interest" which is not dependent on the perceptions of the various parties involved. There are, undeniably, cases in which an individual's perception of the effect a policy will have upon his or her interests turns out to be in error. But even in this instance, documentation of the shift in perception, and the reason for that shift, would add fascinating grist to our theory mill. The notion of "subjective interest" is fraught with fewer conceptual difficulties than the attempt to define objective interests, but the real reason for emphasizing subjective interests is that it will almost certainly have more theoretical significance for our understanding of the policy process. It is, after all, an individual's perceptions of a policy that will lead him or her to support or oppose it, not whether it is good or bad in some objective sense.

The Logic of Comparative Analysis

In a general sense, all theoretical research is comparative (Warwick and Osherson, 1973). Girls are compared to boys on some attribute such as mathematics achievement. Children from high socio-economic status families are compared to children from low socio-economic status families in terms of their I.Q. or their self esteem. Experimental groups are compared to control groups on various criterion measures. The distinctive feature of what has come to be called "comparative analysis" is that it is systems (e.g., societies, states, economic systems, or state educational policy systems) that are being compared with respect to certain of their

attributes. At the outset, the systems themselves are deemed qualitatively distinct. The basic research question is of the form: How does system A differ from system B with respect to variable X?

Concepts, or attributes, when used in research, have a referrent, and that referrent may be at any of several levels. In education, for example, we can conceive of the individual, classroom, school site, LEA, SEA, and federal levels of analysis. Each of these levels can be thought of as a "policy system" and various attributes can be associated with each level. "Class size," for example, is clearly a classroom level concept, although "average class size" might be a school or LEA level attribute, depending upon which system the mean was calculated for. Disparities in per-pupil expenditures, referred to earlier in this paper, is a state level attribute because it refers to within-state disparities but, assuming the availability of data, the concept could be calculated for a school or a local district, or the nation. "Democratically controlled legislature" is a state level attribute.

To put it slightly differently, one of the first things to ask about any social science research project is what constitutes a <u>case</u>. In much research, individuals are the <u>cases</u> and the research deals with relationships between attributes of those individuals examined across a number of cases. In state comparative policy research, the states are <u>cases</u> and we concern ourselves with the attributes of states and how those attributes are related to each other when examined across a number of states. In fact, the only way to establish empirically a relationship between two state-level variables is to examine the two attributes across enough states to ensure variability in both attributes. The only variation in such state-level concepts will be between states.

Sometimes comparative scholars get so enamored of the concepts they are attempting to measure that they lose sight of the fact that it is the cases they are describing by using those concepts. The general knowledge we strive for will be knowledge about the cases (i.e., state educational policy systems). When and if we generalize beyond the cases we have observed, it will be to similar cases elsewhere.

Basic Comparative Design. Let us illustrate the basic comparative state policy research design by reference to the figure below. If we had data only on some outcome variable, such as a measure of the variety of civics textbooks used in the state, we would undoubtedly note more variety displayed in some states than in others. We might be tempted to hypothesize

Basic Comparative State Policy Design

Cases	Background Variable (state level)	Policy Variable (state level)	Outcome Variable (state level)
California	x_1	p_1	y_1
Illinois	x_2	p_2	y_2
Mississippi	x_3	p_3	y_3
Wyoming	x_n	p_n	y_n
	X ⟷	P ⟷	Y

(Relationships between three kinds of variables established by appropriate measure of association.)

that these interstate differences are attributable to variation in state policies with respect to the selection of textbooks. States in which a

state-wide committee adopts a short list of texts for each school subject might typically adopt civics texts with less ideological variety than states which developed a long list, or left the adoption decision to LEAs or even individual teachers. We have now postulated a policy variable that may help account for observed differences between states. Notice that we were not content to rest with the observation that Illinois displays more variety than California, but we moved immediately to a search for a policy variable which would help account for the observed differences.

Exactly the same process may be repeated now as the research question shifts to why some states adopt short lists of textbooks, while others adopt longer lists or leave discretion to lower policymaking levels. Again, inter-state differences may provide a clue as to what underlying dynamics are at work. One plausible hypothesis might be that states with strong traditions of centralized policymaking in other areas of governance also tend to centralize the textbook adoption process. Once again, it is important to realize what we have done to this point. Each time a new research question arose as to why differences exist between states on a certain variable, we examined those differences and formulated a new hypothesis postulating a relationship between the observed variable and some new source of variation between the states. This process is not logically distinct from the process one employs when molecules, or individuals, or local school districts constitute the cases rather than states. By moving to the state level we have, however, addressed a new source of variation and a class of variables which can not be examined at lower levels.

It may be that there is, furthermore, an important heuristic advantage provided by state level analysis. We carry around in our heads a surprising amount of information about states including (but not limited to) approximations

of their location, size, population, ethnic composition, wealth, economic base, and political coloration. Our attempts to formulate plausible hypotheses about why Illinois, Massachusetts, and New York are expected to suffer sharper declines in numbers of high school graduates over the next fifteen years than California, Arizona, and Utah (Western Interstate Commission, 1979) are informed by a lot of common knowledge about other differences between those two groups of states.

Nested Comparative Design. With nested comparative design, the situation is slightly more complicated. Here the first order comparisons are made between lower level variables (i.e., attributes of local districts, schools, classrooms, or individuals) which vary within states. Let us assume that we have found a positive relationship between "percentage of teachers belonging to the collective bargaining unit" and "school days lost to teacher work actions" for all districts within a state. A second-order question might be whether that relationship holds across states, including those with and without legislation which bars strikes by public employees. If we did, indeed, find that when the study was replicated in several other states the same positive relationship always appeared between the two local-level variables, we would be fairly confident that the relationship is invariant under various state policy or background conditions.

But what if we find that the relationship holds in some states but not in others? Once again we will use what we know about the states--differences in the nature of their teaching corps, or in their legal stances with respect to strikes by public employees, etc.--to generate a state-level variable that will help explain the fact that the relationship holds only in certain kinds of states. We now have nested a lower (local district) level of analysis within a higher (state) level.

Nested comparative design should not be confused with research which simply aggregates lower level cases across states to increase

Nested Comparative Design

Cases	Background Variable (local level)	Policy Variable (local level)	Outcome Variable (local level)
CALIF: District_1	x_1	$\xrightarrow{+}$ p_1	$\xrightarrow{-}$ y_1
CALIF: District_2	x_2	p_2	y_2
CALIF: District_N	x_N	p_N	y_N
ILLINOIS: District_1	x_1	$\xrightarrow{+}$ p_1	$\xrightarrow{-}$ y_1
ILLINOIS: District_2	x_2	p_2	y_2
ILLINOIS: District_N	x_N	p_N	y_N
.	.	.	.
.	.	.	.
.	.	.	.
WYOMING: District_1	x_1	$\xrightarrow{o}$ p_1	$\xrightarrow{+}$ y_1
WYOMING: District_2	x_2	p_2	y_2
WYOMING: District_N	x_N	p_N	y_N

the total number of cases. Only when a state-level comparison is made, or a state-level variable is employed to interpret lower-level relationships, do we have a truly nested comparative design.

Establishing Comparability

The "equivalence problem" so widely celebrated in comparative research is, I believe, really two problems. The first of these is a matter of establishing the equivalence, or comparability, of whatever

cases are being compared. This is seldom a problem when our cases are fairly clearly bounded systems, such as states, local school districts, or nations. There might, however, be some question as to whether all intermediate education agencies (IEAs) within states are comparable cases if the analysis extends beyond a single state. In other words, should IEAs in Illinois be compared to IEAs in Oregon, where the structure and function of the agencies are substantially different, one might raise the question of case equivalence. This equivalence of cases problem is more than a matter of definition, for we could fashion a definition that would be broad enough to include IEAs in all of the states that have them. Rather, the researcher needs to satisfy potential critics that the cases (whether molecules, individuals, institutions, states, etc.) perform much the same function(s) within the larger system of interest. Establishing the functional equivalence of cases is not a very precise endeavor, but there are clearly instances when institutions that are similarly named in various states perform quite different functions, and other times when institutions that perform much the same functions are called by quite different names. Even non-functionalists can often agree that functional criteria of equivalence are the only ones that make much sense in determining the equivalence of cases (see Merritt, 1970: 116).

The second kind of equivalence problem, about which much more is written, is a matter of establishing the equivalence of the concepts we use to describe our cases and of the classification and measurement techniques we use. The simple part of this problem is doing what one can to increase the reliability of measurement in the face of obvious dissimilarities in setting, language, etc., as we move from system to system. Aggregate data on average daily attendance, for example, may be derived in quite different

ways in different states.

The more difficult facet of attribute equivalence has to do with possible shifts in the meaning of the concept, or attribute, in moving from one system to another. One may, for instance, rank states on an urban-rural dimension by rather arbitrary criteria. Once done, however, it is still not entirely clear that urban means the same thing in New York and California, or that rural has the same meaning in South Dakota and New Hampshire.

Or, even worse, assume that we were conducting a study in which we wish to ascertain the views of school administrators on the subject of local control of education. It seems likely that local control may denote something quite different for administrators in New York City than it denotes for administrators in most other locales. Each state has, to some extent, its own history and its own culture coloring the meanings which respondents attach to the concepts we are attempting to measure and the terms we use to elicit their responses. Positivists are disinclined to worry excessively about such problems, on the assumption that if concepts such as urbanization or local control of schools are severely vitiated by a lock of common meaning, they will not turn out to be strongly associated with much of anything anyway.

An Alternative Strategy--and Epistomology--Rejected

The preponderance of the work done on state education policy systems to date has been in the form of single state case studies--i.e., detailed descriptions of the education policy system or some aspect of that system in a single state. Several multiple state case studies have also appeared, and the contributions of some of the best of these are reviewed by Burlingame and Geske (1979). If all goes well in a case study, the observer, after giving close and often prolonged attention to as many

elements of the situation as feasible, develops an appreciation about which features are important for analysis and which are not. Case studies are often styled as "exploratory." Hypotheses are eschewed as too limiting, probably premature, and (in any event) untestable on the single case. Case studies are typically rich in contextual detail and attempt to provide a sense of the dynamics of the decisionmaking process. They may convey a great deal of factual information and provide the reader with a feeling that he or she "knows" the system. Often, they tell a story—something that is difficult to do when presenting contingency tables or discussing multiple regression equations.

Nowhere is it written, so far as I know, that case studies cannot be quantitative. In providing a thorough description of an institution, or a process, there will be things to count and perhaps even summary statistics to compute. What can not be done within a single case study is any relating of variables--because in the pure case study there are no variables.[1] We can describe the properties of the case, and even measure them, but we can gain no evidence about what covaries with what unless we are willing to add other cases and do an analysis across them.

The strength of the case study approach is that it provides researchers a familiarity, even intimacy, with the case that may be lacking in other approaches. Hunches, insights, intuition may lead to a powerful new concept or a postulated relationship. In principle, those insights could be tested on other cases by researchers operating in our first mode. In practice, the two traditions seldom connect. Ethnographers tend to be too concerned with nuance and the "meaning" of what they observe to provide much grist for the positivist's theory mill. And the theory testers among us offend the ethnographers by stripping out a handful of variables and testing their relation-

ships with slight regard for the larger context.

The two most frequently cited weaknesses of the case study approach are: (1) case studies do not, and can not, "explain" anything because they do not produce tested covering laws which are an essential ingredient of explanation, and (2) even the description in a case study, which may be valuable in understanding that case, cannot be generalized to any wider set of cases because a sample of one is not representative of any population of cases.

Proponents of case studies reply that their objective is not to explain in the deductive-nomological sense, but rather to understand the case. Max Weber's concept of "verstehen"--understanding based not upon propositions, but upon analogies with the observer's earlier experiences--provides the epistemological basis. Similarly, generalizability is claimed by the subjective assessment of the reader that the described case is sufficiently similar to another to warrant the assumption that similar patterns and interrelationships probably exist.

Case studies are a necessary, sometimes delightful, introduction to a new area of inquiry. There is little evidence, however, that this approach has fulfilled its promise of generating testable hypotheses. Without reference to other cases, not to mention imposition of effective controls, there is virtually no way to attribute events that transpire to other events or conditions. Specific descriptions which a case study may yield seldom cumulate across cases due to the idiosyncratic tendencies of ethnographic research. The lack of clear criteria as to what concepts may be useful, what counts as evidence, how assertions are to be justified, and to what extent, if at all, conclusions may be generalized to other cases, valuable only as an opening gambit in a long contest.

State Policy Analysis and the Need for General Knowledge

Policy research is not all post hoc; an important arm of this body of research involves attempts to evaluate policy alternatives before authoritative decision is made. A crucial part of that evaluation is being able to predict, as accurately as possible, all of the significant outcomes (intended or unintended) of each alternative proposed.

State education policies affect many communities, institutions, and people. More and better general knowledge about the linkages between policies and their consequences in a variety of settings is urgently needed. Policy decisions are made every day based upon intuition, misinformation, or tradition. One of the interesting features of recent proposals for a voucher system in California was the real sense of uncertainty as to what the effects might be.

The development of a body of general knowledge relevant to state education policy decisions will be a long, difficult task, but the priority is high. Unfortunately, there are no shortcuts. Policy relevant propositions must be generated and tested by the best social science methods available, then woven into theories with explanatory and predictive power. Comparative studies of state education policy systems will play a major role in that process.

References:

Bendix, Reinhard, "Concepts and Generalizations in Comparative Sociological Studies," American Sociological Review (28:1968) p. 9.

Burlingame, Martin and Geske, Terry G., "State Politics and Education: an Examination of Selected Multiple State Case Studies," Educational Administration Quarterly (June 1979).

Coombs, Fred S., "The Bases of Noncompliance with a Policy," Policy Studies Journal (June 1980), forthcoming.

Dahl, Robert A., Modern Political Analysis (Englewood Cliffs, N.J.: Prentice-Hall, 1963).

Dearman, Nancy B. and Plisko, Valena White, The Condition of Education, 1979 Edition (Washington, D.C.: National Center for Education Statistics, 1979).

Easton, David, The Political System (New York: Knopf, 1953).

Education Commission of the States, States Activity--Minimum Competency Testing (ECS Department of Research and Information, January 1979).

Hess, Robert D. and Torney, Judith V., The Development of Political Attitudes in Children (Chicago: Aldine, 1968).

Lasswell, Harold D., Politics, Who Gets What, When, How? (New York: McGraw Hill, 1936.

Merritt, Richard L., Systematic Approaches to Comparative Politics (Chicago: Rand McNally, 1970).

Merritt, Richard L. and Coombs, Fred S., "Politics and Educational Reform" Comparative Education Review (June/October 1977).

Osgood, Charles E., "On the Strategy of Cross-National Research into Subjective Culture," Social Science Information (1967).

Pierce, Lawrence C., Garms, Walter L., Guthrie, James W. and Kirst, Michael W., State School Finance Alternatives (Eugene, Oregon: Center for

Educational Policy and Management, 1975).

Przeworski, Adam and Teune, Henry, The Logic of Comparative Social Inquiry (New York: Wiley-Interscience, 1970).

Przeworski, Adam and Teune, Henry, "Equivalence in Cross-National Research" in Donald P. Warwick and Samuel Osherson (eds.), Comparative Research Methods (Englewood Cliffs, N.J.: Prentice-Hall, 1973).

Suchman, E.A., "The Comparative Method in Social Research," Rural Sociology (1964).

Warwick Donald P. and Osherson, Samuel, "Comparative Analysis in the Social Sciences" in Warwick and Osherson (eds.), Comparative Research Methods (Englewood Cliffs, N.J.: Prentice-Hall, 1973).

Western Interstate Commission, National Institute of Independent Colleges and Universities, and the Teachers Insurance and Annuity Association, High School Graduates: Projections for the Fifty States (Boulder, Colorado: Western Interstate Commission for Higher Education, 1979).

Wiles, David K., "State Level Educational Politics: Old Problems and New Research Directions," paper presented at the annual meetings of the Politics of Education Association, San Francisco, April 1979.

Wirt, Frederick M., "Policy as Value, Region, and History in the American States: The Case of Education," paper delivered at the Midwest Political Science Association Convention, Chicago, April 1978.